## REMARKS

The Official Action mailed January 30, 2003, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to June 30, 2003. Accordingly, the Applicant respectfully submits that this response is being timely filed.

Claims 1-29 are pending in the present application and claims 1, 3-7 and 9 have been amended to better recite the features of the present invention. Claims 1-3 and 12-15 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on September 27, 2000, October 12, 2000, February 14, 2001, March 11, 2002 and October 21, 2002.

Paragraph 2 of the Official Action objects to claims 2 and 3 for duplication. In response, the Applicant has amended claim 3 to recite "performing sampling and A/D conversion on an analog image signal on the basis of a fixed clock signal and obtaining a digital image signal." This amendment is supported by at least Embodiment 5, in particular, the paragraph bridging pages 44 and 45 where it is taught that an analog image signal is converted into a digital image signal by A/D conversion at sampling timing due to a "fixed clock signal" and that the digital image signal after a signal processing is converted into an improved analog signal image by D/A conversion using a modulated clock signal. Also, the term "fixed clock" is defined in the specification at page 21 as a clock signal which operates at a constant frequency on the basis of a reference clock signal. In light of the amendment to claim 3, the Applicant respectfully requests reconsideration and withdrawal of the objection.

Paragraph 4 of the Official Action rejects claims 5-7 and 17-19 under 35 U.S.C. § 112, first paragraph, for lack of enablement. Specifically, the Official Action asserts that the specification does not enable the feature of randomly shifting a frequency of a reference clock signal, or shifting a frequency of a reference clock signal in the form of either a sine wave or a triangular wave. The Applicant respectfully traverses the assertion and the rejection. These features are described in the specification at least at page 7, paragraphs 4-6. Also, the modulation of clock signals is described in the

present specification, for example, at page 15. The Applicant respectfully submits that the teaching in the specification of the present invention is sufficient to enable one of ordinary skill in the art to make and use the present invention. Given the teaching in the specification, the Applicant respectfully submits that claims 5-7 and 17-19 are enabled. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 112 are in order and respectfully requested.

Paragraph 6 of the Official Action rejects claims 1, 5, 12, 13 and 17 as anticipated by U.S. Patent No. 6,046,735 to Bassetti et al. The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present invention. Bassetti does not teach all the elements of the independent claims, either explicitly or inherently.

Amended independent claim 1 recites applying a modulated clock signal to a source signal line-side driving circuit of a display device. Similarly, independent claims 12 and 13 recite a display device comprising a source signal line-side driving circuit where a modulated clock signal is input to the source signal line-side driving circuit. In contrast, Bassetti teaches that "pixels are transferred to the flat-panel display using the frequency-modulated video clock ... but the horizontal and vertical timing signals are generated by the video clock without modulation" (col. 6, lines 24-27). Bassetti does not teach applying or inputting a modulated clock signal to a source signal line-side driver circuit.

Further, with respect to independent claim 12, Bassetti does not teach that a modulated clock signal obtained by frequency modulating a reference clock signal is input to a source signal line-side driving circuit, while a fixed clock signal is input to a gate signal line-side driving circuit. With respect to independent claim 13, Bassetti does not teach that a modulated clock signal obtained by frequency modulating a reference clock signal is input to a source signal line-side driving circuit, while a modulated clock signal which differs from the modulated clock signal in quantity of frequency shifting or method of frequency modulation is input to a gate signal line-side driving circuit.

Since Bassetti does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly,

reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) are in order and respectfully requested.

Paragraph 8 of the Official Action rejects claims 2, 3 and 8-11 as obvious based on the combination of Bassetti and U.S. Patent No. 6,115,020 to Taguchi et al. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2143-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Bassetti and Taguchi do not teach or suggest either performing sampling and A/D conversion on an analog image signal on the basis of a modulated clock signal, and performing D/A conversion on a digital image signal on the basis of a reference clock signal, or performing sampling and A/D conversion on an analog image signal on the basis of a fixed clock signal, and performing D/A conversion on a digital image signal on the basis of a modulated clock signal.

The Official Action appears to assert that Bassetti teaches all the claimed limitations except for an analog-to-digital converter, for which Taguchi is relied upon by

the examiner. The Applicant respectfully disagrees with this rejection. Even if the motivation to combine Bassetti and Taguchi were proper, the combination would not render the present invention obvious. Specifically Bassetti and Taguchi do not teach or suggest either performing sampling and A/D conversion on an analog image signal on the basis of a modulated clock signal, and performing D/A conversion on a digital image signal on the basis of a reference clock signal (claim 2), or performing sampling and A/D conversion on an analog image signal on the basis of a fixed clock signal, and performing D/A conversion on a digital image signal on the basis of a modulated clock signal (claim 3).

With respect to claims 8-11 as they depend from independent claim 1, as noted above, Bassetti does not teach applying or inputting a modulated clock signal to a source signal line-side driver circuit. Taguchi does not cure the deficiencies in Bassetti. The Official Action relies on Taguchi to teach an A/D converter (page 5, Paper No. 15). Bassetti and Taguchi, either alone or in combination, do not teach or suggest applying or inputting a modulated clock signal to a source signal line-side driver circuit.

Since Bassetti and Taguchi do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraph 11 of the Official Action rejects claims 14, 15 and 20-29 as obvious based on the combination of Bassetti and U.S. Patent No. 5,703,621 to Martin et al. The Applicants respectfully traverse the rejection because the Official Action has not made a *prima facie* case of obviousness.

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Bassetti and Martin do not teach or suggest either that an image signal sampled on the basis of a modulated clock signal obtained by frequency modulating a reference clock signal is input to a signal electrode of a passive matrix circuit, and a fixed clock signal being input to a scanning electrode of the passive matrix circuit (claim 14) or that an image signal sampled on the basis of a modulated clock signal obtained by frequency modulating a reference clock signal is input to a signal electrode of a passive matrix circuit, and a modulated clock signal which differs

from the modulated clock signal in quantity of frequency shifting or method of frequency modulation is input to a scanning electrode of the passive matrix circuit (claim 15).

The Official Action concedes that "Bassetti does not teach the display device having [a] passive matrix circuit" (page 8, Paper No. 15). Even though Martin appears to teach a monochrome display, nothing in Bassetti or Martin teaches or suggests that an image signal should be input to a signal electrode of a passive matrix circuit, as is required by independent claims 14 and 15 of the present invention.

Since Bassetti and Martin do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraphs 9 and 10 of the Official Action reject dependent claims 4, 6, 7, 16, 18 and 19 as obvious based on the combination of Bassetti and either U.S. Patent No. 6,281,873 to Oakley or U.S. Patent No. 4,713,688 to Guttner. Oakley and Guttner do not cure the deficiencies in Bassetti. The Official Action relies on Oakley to teach Gaussian filter coefficients (page 6, Paper No. 15) and on Guttner to teach offset rasters that facilitate offset demodulation (page 7, Id.). Bassetti, Oakley and Guttner, either alone or in combination, do not teach or suggest applying or inputting a modulated clock signal to a source signal line-side driver circuit; performing sampling and A/D conversion on an analog image signal on the basis of a modulated clock signal, and performing D/A conversion on a digital image signal on the basis of a reference clock signal; performing sampling and A/D conversion on an analog image signal on the basis of a fixed clock signal, and performing D/A conversion on a digital image signal on the basis of a modulated clock signal; or that an image signal should be input to a signal electrode of a passive matrix circuit.

Since Bassetti, Oakley and Guttner do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

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